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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,809	07/26/2001	David C. Chou	11088-39607	7489

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ALBUQUERQUE, NM 87103

EXAMINER

JARRETT, RYAN A

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 12/19/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/915,809

Applicant(s)

CHOU ET AL.

Examiner

Ryan A. Jarrett

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/26/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "heads up display which can be detached from said housing while remaining connected to said computer means" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 4, 5, 10, 12, 14-16, and 18 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Snapp et al. U.S. 2003/0069693. Snapp et al. discloses an integrated compact, self-contained surveillance unit (e.g. [0078]), said unit comprising: housing means (e.g., [0012], Fig. 1), sensor means attached to said housing means (e.g., [0028], [0166], [0171]); means, attached to said housing, for determining the

position of said unit (e.g., [0015]); means, attached to said housing means, for sending communications from said unit (e.g., [0035], [0134]); computer means attached to said housing means, said computer means connected to said sensor means, said position determination means, and said communication means (e.g., [0032]); and image output means attached to said housing means connected to said computer means (e.g., [0072], [0073], [0134], [0166], [0171]);

wherein said sensor means includes a sensor selected from the group including visible sensors (e.g., [0166], [0171]), UV sensors, short wavelength infrared sensors and long wavelength infrared sensors (e.g. [0134]);

wherein said position determination means includes GPS position determination means (e.g., [0015]);

including means for determining the motion of said unit (e.g., [0031], [0134]);

wherein communication means is bi-directional; wherein said communication means includes RF communication means (e.g., [0035], [0134]);

further including power supply means; wherein said power supply is a battery (e.g., [0031]);

further including temperature sensing means connected to said computer means (e.g., [0030], [0134]);

further including means for manipulating data by the user of said surveillance unit (e.g., [0063]).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snapp et al. as applied to claim 1 above, and further in view of Hansen U.S. Patent No. 5,035,472. Snapp et al. does not disclose that the integrated gun-sight means also includes an uncooled focal plane array. However, Hansen discloses an integrated multi-spectral man portable weapon sight, including a sensor means that contains an uncooled focal plane array (col. 3 lines 40-61). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the integrated gun sight of Snapp et al. to include an uncooled focal plan array since Hansen teaches that an uncooled focal plane array is an effective way to collimate an infrared spectrum and to ultimately reconvert the infrared spectrum to the visible spectrum, thus enabling night vision for the user of the sight assembly.

6. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snapp et al. as applied to claim 5 above. As called for by claims 7 and 8, Snapp et al. **does** disclose a means for determining direction (e.g., [0012]); wherein said GPS position determination means is coupled to said means for determining direction, said computer means, and said communication means (e.g., Fig. 3). Snapp et al. **does not** specifically disclose that said motion determination means is an accelerometer.

However, is it well known to incorporate accelerometers into global positioning systems in order to determine the position, direction, and motion of a user. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the global positioning system of Snapp et al. to include accelerometers since they are accurate and reliable devices that are capable of calculating the motion or speed of a mobile unit.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snapp et al. as applied to claim 4 above, and further in view of Ellenby et al. U.S. Patent No. 6,064,398. Snapp et al. does not disclose that the position determination means also includes GLONASS position determination means. However, Ellenby et al. discloses an electro-optic visioning system, which includes a GPS position determination means **and** a GLONASS position determination means coupled to a computer and communication means (e.g. col. 8 lines 33-40). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Snapp et al. with Ellenby et al. in order to receive signals from the Russian satellites that a part of the GLONASS system.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snapp et al. as applied to claim 10 above. Snapp et al. does not specifically disclose that the bi-directional communication means includes a multi-mode patch antenna. However, multi-mode patch antennas are well known in bi-directional communication systems. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a multi-mode patch antenna in the bi-directional

communication system of Snapp et al. in order to separately receive and process the GPS signals and the two-way voice radio signals disclosed by Snapp et al. ([0134]).

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snapp et al. as applied to claim 1 above. Snapp et al. does disclose that said computer means includes digital signal processing means and memory means ([0027], [0034]). Snapp et al. does not specifically disclose that the computer includes a field programmable gate array. However, it is well known to use FPGA's in computer applications. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include an FPGA in the computer of Snapp et al. in order to re-program or re-calibration the GPS, display, and/or sensor functions of the computer.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snapp et al. as applied to claim 1 above, and further in view of JP 2001091268 A. Snapp et al. discloses that the image output means includes a display which can be detached from the housing (e.g., see Fig. 1 reference number 13). Snapp et al. does not explicitly disclose that this display remains connected to the computer means while in the detached state, although one of ordinary skill in the art would presume that the detached display would remain wirelessly connected to the remaining geospatial module so that the display could still receive GPS images. Nonetheless, JP 2001091268 has been introduced as a secondary reference which closes this particular gap in the Snapp et al. reference and thus removes all remaining doubt. JP 2001091268 discloses a navigation system comprising a base apparatus and a detachable display device which can be connected wirelessly or through a cable (e.g.,

see Figs. 1-3 and the translated abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Snapp et al. with JP 2001091268 so that the detachable display of Snapp et al. could still receive and display GPS image data while in the detached state.

11. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snapp et al. as applied to claim 18 above. Snapp et al. discloses a means for manipulating data by the user of said surveillance unit (e.g., [0063]), but Snapp et al. does not specifically disclose that said information manipulation means is a touchpad. However, touchpads are a well-known means for inputting information to a computer. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Snapp et al. to include a touchpad as the information inputting means since touchpads are easy to manufacture and easy to use.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tachi et al. U.S. Patent No. 4,570,227

DeLorme et al. U.S. Patent No. 6,321,158

Barnard U.S. Patent No. 6,456,938

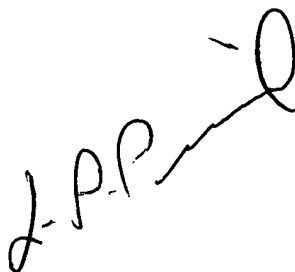
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (703) 308-4739. The examiner can normally be reached on 9:30-6:00 M-F.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (703) 308-0538. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

raj  
December 12, 2003

A handwritten signature in black ink, appearing to read 'L. Picard', with a stylized flourish at the end.

LEO PICARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100